

## REMARKS/ARGUMENTS

Regarding the 35 U.S.C. Section 101 rejection, claim 26 is amended by this paper to recite a “storage medium” which does not include a signal.

Claims 1, 24, 25 and 26 are the pending independent claims in this application. Each of these independent claims includes a limitation not disclosed by or made obvious in view of the prior art.

Each independent claim includes a limitation whereby a “cumulative frequency of occurrence” of two or more names is determined and then “documents are ordered according to the determined cumulative frequency of occurrence of the two or more names”.

As noted in the Office Action at page 5, “Turnbull does not expressly teach ‘frequency of occurrence of names within identified documents.’ ”

Tso teaches using a frequency of occurrence of names to place search results into different “categories” in order to present the search results. However, Tso deals with separating search results into different categories depending upon non-cumulative occurrences of each different attribute value in the search results. The present claims have been amended to recite “cumulative frequency of occurrence” to distinguish from a category approach such as Tso’s where results are not presented in a unified manner but are separated into different groups.

To illustrate Tso’s approach note the below from Tso at col. 5, lines 49-59:

In step 214, similarity data is determined for the search results that indicates the occurrence of the common attribute values among the qualifying data items. For example, the similarity data would indicate how many of the hits in the filtered search results have the attribute values of compact cars, mid-size cars, full size cars, and sports cars, respectively. In step 216, the search results are grouped based upon the similarity data. For example, the qualifying data items having the compact car attribute value are grouped together and the hits in the search results having the mid-size car attribute value are grouped together.

Thus, Tso places a search result into a specific category depending upon the number of occurrences of a single term (e.g., “compact car”) in that search result. Applicant’s “cumulative frequency” approach takes into account the number of occurrences of all terms (e.g., “compact cars,” “mid-size cars,” “full size cars,” “sports cars”) in each search result and orders the search results accordingly. Tso is completely at odds with Applicant’s approach which strives to present all search results in an ordered list. As an example, using notation such as document1:15/0/1/2 to mean that document1 includes 15 occurrences of “compact cars,” 0 occurrences of “mid-size cars,” 1 occurrence of “full size cars” and 2 occurrences of “sports cars”; Tso would place document1:15/0/1/2, document2:2/5/3/1, document3:10/6/18/5 and document4:0/2/4/8 into four different categories as follows: document1 into a “compact car” category; document2 into a “mid-size cars” category; document3 into a “full size cars” category; and document4 into a “sports cars” category. Whereas Applicant’s approach (in one embodiment) would place all of the documents in a list ordered as follows: document3, document1, document4, document2.

Applicant’s list indicates how relevant each document is in providing information about cars while Tso indicates the type of car each document is likely to be discussing. Note that Applicant’s approach is enormously useful for “context” searching in applications where a list of names can effectively provide the desired context. Applications such as genetic research are provided as examples in Applicant’s specification. In such applications there may be hundreds, thousands, tens of thousands or more different names. Tso’s approach would provide thousands of categories of search results in an arrangement that would be particularly awkward for analysis, to say the least.

It is not obvious, or even possible, to combine Turnbull with Tso to achieve the present invention. Even if Tso teaches that “categories within a group may be presented to users in any order” (Office Action at page 6, lines 9-10) it is not possible to achieve the results of Applicant’s invention by merely changing the order of Tso’s categories. An example is that children in a school can not be arranged in an order of who is wearing the most red clothing (shirt, shoes, dress, hat, pants, etc.) by first arranging the children into groups of (1) kids with red shirts, (2) kids with red shoes, (3) kids with red dresses, etc. and then trying to arrange the groups in an order. Tso’s requirement of categories teaches away from Applicant’s invention.

Applicant respectfully submits that the present claims are in condition for allowance and an early Notice of Allowance is earnestly sought. The undersigned may be contacted at the 415-279-5098 at the Examiner's convenience if it would help in the prosecution of this matter.

Respectfully submitted,

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